

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A calcium phosphate cement composition, comprising:
  - a biphasic powder A comprising  $\alpha\text{-Ca}_3(\text{PO}_4)_2$   ~~$\alpha\text{Ca}_3(\text{PO}_4)_2$~~  and  $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$   ~~$\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$~~ ; and
  - a single phase powder B comprising  $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$   ~~$\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$~~  wherein the cement has a molar ratio of Ca/P of 1.35 - 1.40.
2. (Original) A calcium phosphate cement composition of claim 1, wherein the powder A and the powder B are mixed in a mixing ratio of 70:30 to 80:20 by weight.
3. (Original) A calcium phosphate cement composition of claim 1, wherein the powder A and the powder B are mixed in a mixing ratio of 75:25 by weight.
4. (Original) A calcium phosphate cement composition of claim 1, wherein the particle size is less than 40  $\mu\text{m}$ .
5. (Original) A calcium phosphate cement composition of claim 1, having a compressive strength of 34 - 39 MPa.
6. (Currently Amended) A calcium phosphate cement composition of claim 1, further comprising 15 wt%  $\beta\text{-Ca}_3(\text{PO}_4)_2$   ~~$\beta\text{-Ca}_3(\text{PO}_4)_2$~~ .
7. (Currently Amended) A calcium phosphate cement composition of claim 6, wherein the said composition has a compressive strength up to  $50 \pm 3$  MPa.
8. (Original) A method of preparing a calcium phosphate cement composition, comprising:

- a) adding a preheated  $\text{Ca}(\text{NO}_3)_2 \times 4\text{H}_2\text{O}$  solution to a  $(\text{NH}_4)_2\text{HPO}_4$  solution under stirring followed by addition of concentrated  $\text{NH}_4\text{OH}$  solution and subsequently calcining  $\beta$ -calcium tertiary phosphate and hydroxyapatite to form a biphasic powder A comprising at least 95 wt%  $\alpha$ -calcium tertiary phosphate and no more than 5 wt% hydroxyapatite;
  - b) adding a  $\text{Na}_2\text{HPO}_4 \times 2\text{H}_2\text{O}$  solution to a  $\text{KH}_2\text{PO}_4$  solution under stirring followed by adding of  $\text{Ca}(\text{NO}_3)_2 \times 4\text{H}_2\text{O}$  to form single-phase powder B  $\text{CaHPO}_4 \times 2\text{H}_2\text{O}$ ; and
  - c) mixing of powder A with powder B and subsequently milling to form the cement powder with an overall molar ratio of Ca/P of 1.35 - 1.40.
9. (Original) A method of claim 8, wherein powder A and powder B are mixed in a mixing ratio of 70:30 to 80:20 by weight.
10. (Original) A method of claim 8, wherein powder A and powder B are mixed in a mixing ratio of 75:25 by weight.
11. (Original) A method of claim 8, wherein the setting solution has a concentration of 3 wt%.
12. (Original) A method of claim 8, wherein the particle size of the calcium phosphate cement composition is less than 40  $\mu\text{m}$ .
13. (Currently Amended) A method of claim 8, further comprising adding 15 wt%  $\beta$ -calcium tertiary phosphate whisker to increase the strength of the cement up to 50  $\pm 3$  MPa.

14. (Original) A method of claim 8, wherein a composition before calcining comprises at least 95 wt%  $\beta$ -calcium tertiary phosphate and no more than 5 wt% hydroxyapatite.

15. (Original) A method of claim 8, wherein the calcining is conducted at about 1200°C.

16. (Original) A method of claim 8, wherein the biphasic powder A comprises 95 wt%  $\alpha$ -calcium tertiary phosphate and 5 wt% hydroxyapatite.

17. (Currently Amended) A calcium phosphate cement composition, consisting essentially of:  
a biphasic powder A comprising  $\alpha$ - $\text{Ca}_3(\text{PO}_4)_2$  and  $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$   
 $\text{Ca}_{10}(\text{PO}_4)(\text{OH})_2$ ; and  
a single phase powder B comprising  $\text{CaHPO}_4 \times 2\text{H}_2\text{O}$ ; wherein the cement has a molar ratio Ca/P of 1.35-1.40.

18. (Currently Amended) A calcium phosphate cement composition, consisting of:  
a biphasic powder A comprising  $\alpha$ - $\text{Ca}_3(\text{PO}_4)_2$  and  $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$   
 $\text{Ca}_{10}(\text{PO}_4)(\text{OH})_2$ ; and  
a single phase powder B comprising  $\text{CaHPO}_4 \times 2\text{H}_2\text{O}$ ; wherein the cement has a molar ratio Ca/P of 1.35-1.40.

19. (Original) A calcium phosphate cement composition of claim 1, wherein the cement has a molar ratio of Ca/P of 1.36 – 1.39.

20. (Original) A method according to claim 8, further comprising mixing a mixture of powders A and B with a setting solution,  $\text{Na}_2\text{HPO}_4 \times 2\text{H}_2\text{O}$ .